By Dan Henderson, N1ND<br>Contest Branch Manager

# 1999 ARRL International EME Competition Results 

(with apologies to Dragnet)

The stories you are about to read are true. None of the callsigns have been changed, because no one is innocent...
They were working the Moonrise/Moonset shifts the weekends of October 30-31, 1999 and November 27-28, 1999 during the 1999 ARRL International EME Competition. All of the usual suspects were present, along with many new operators anxious to test their capabilities at what may be the greatest challenge in Amateur Radio. When the last echo had faded, the paperwork began.

It's hard to imagine the detective work required to amass $2,763,000$ points during a moonbounce contest. However, Gerald, K5GW, had done his homework and reported in with an effort that clearly outpaced the competition. Surely very few stations were not "investigated" by Gerald during the contest. He turned in a Single Operator, Multi-Band effort of 307 QSOs and 90 multipliers total from the 144,432 and 1296 MHz bands. Our 1998 champion Ernst, OE5EYM, scanned the ether for $1,502,300$ points to earn runner-up honors in this category in 1999.

We knew that 1998 top 144 MHz Single Op sleuths would be in a heated contest to show who was still the "ace detective" on that band. Torbjorn, SM5FRH, regained the crown that Dave, W5UN, had taken from him as he edged out his chief rival by a score of $1,920,000$ to $1,711,000$. Leif, SM5BSZ, was once again in hot pursuit, again finishing in third place.

Down in the 432 MHz precinct, Jan, DL9KR, continued to lead the way for a seasoned band of $70-\mathrm{cm}$ enthusiasts. Steve, K1FO, jumped from fourth to second place in this hotly contested category. K5JL continued to show why he is the "precinct captain" down in the $1296-\mathrm{MHz}$ area with another outstanding win. There was some shuffling among the places, but any who tried to hide their signals while operating in the $1296-\mathrm{MHz}$ range was sure to be spotted by several of the "sleuths" patrolling an increasingly popular beat.

While some outstanding detectives work well alone, many others pool their expertise


Is OK1DFC demonstrating his "armstrong" antenna rotation system on this 1296 MHz dish?


DJ3FI makes adjustments to his $6 \times 36$ element $70-\mathrm{cm}$ array.
and band together to share information and talent. After finishing a very respectable second in the Multi-Operator Multi-Band category in 1998, the JL1ZCG team that included JH1DYV, JR4ENY and JE8IVF, finished as the top team in that category in 1999.

The Multi-Op single band patrols pro-


The secret to SM5FRH's success? He has lots of "moose power" at his station.


OZ6OL operating his homebrew transceiver during the EME contest.
duced few surprises. KB8RQ, with his talented sidekick N8DFN, led the way in 144 MHz . With a little shuffling of the final order of finish, the 1998 runners-upthe teams of IK3MAC, F5VS and HB9Qall finished in close order behind KB8RQ. Another veteran crew at OH 2 PO duplicated
their 432 MHz triumph of the previous year while the seasoned crew at ON5RR nabbed the top spot on 1296 MHz , up from their third place finish of 1998. Special congratulations to the team at OK1KIR who managed to snare three QSOs on 5760 MHz during the contest.

So roll call at the EME Competition was complete with several hundred officers reporting in from various precincts. All took great care in trying to dig out the evidence of completed QSOs on what is a very difficult "case" to be assigned. Rookies to the event learned new ways to patrol the beat. Judging from the number of QSOs reported, interest in this type operation is on the increase.

No arrests will be made from among the suspects, but all of the participants are to be commended for outstanding efforts at plying the tools of the trade to make this


DL7MAT operating at DL5MAE.
another successful event. Come this fall, the "Old Man" will send out the word that the sleuths of the EME beat are to assemble and
track down the faint signals. Watch for the announcement in September's QST. Until then, "let's be careful out there."

## Scores

 $=10 \mathrm{GHz}$ ).

| Single Operator, Multiband |  |  |  |  | W5UN | 1,711,000 | 290 | 59 | B | YO2II | 9,100 | 13 | 7 | B | K3HZO | 96,000 | 40 | 24 | E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K5GW | 2,763,000 | 212 | 50 | B | SM5BSZ | 1,026,000 | 190 | 54 | B | N1RWY | 7,000 | 10 | 7 | B | JH5LUZ | 71,400 | 34 | 21 |  |
|  | -763 88 | 34 |  | D | I2FAK | 798,700 | 163 | 49 | B | JR5JXV | 6,300 | 9 | 7 | B | JA6CZD | 64,000 | 32 | 20 | E |
|  | 7 | 6 |  | E | VE3KH | 733,200 | 156 | 47 | B | UA3DJG | 6,000 | 10 | 6 | B | DH9FAG | 54,600 | 26 | 21 | E |
| OE5EYM | 1,502,300 | 80 | 33 | B | OZ1HNE | 629,800 | 134 | 47 | B | W70E | 5,400 | 9 | 6 | B | W3XS | 47,600 | 28 | 17 | E |
|  | ,502,300 | 24 |  | D | IK1FJI | 544,500 | 121 | 45 | B | 8J1RL (JA | , op) |  |  |  | WA4OFS | 19,200 | 16 | 12 |  |
|  | 47 | 26 |  | E | WøHP | 479,600 | 109 | 44 | B |  | 4,200 | 7 | 6 | B | W7QX | 13,000 | 13 | 10 |  |
| N2IQU | 1,008,000 | 101 | 36 | D | DL5MAE | 473,000 | 110 | 43 | B | JA8LLE | 2,500 | 5 | 5 | B | WD5AGO | 12,000 | 12 | 10 | E |
|  | 1,008,009 | 27 |  | E | SM7SJR | 459,200 | 112 | 41 | B | W9JN | 2,000 | 5 | 4 | B | JF3HUC | 200 | 2 | 1 | E |
| OZ4MM | 942,400 | 91 | 33 | D | PA2CHR | 450,000 | 100 | 45 | B | W5UWB | 1,800 | 6 | 3 | B |  |  |  |  |  |
|  | -60 | 28 |  | E | LZ2US | 449,400 | 107 | 42 | B | VE3EQQ | 1,600 | 4 | 4 | B | Multiop | r, Multib | nd |  |  |
|  | 1 | 1 |  | F | G3ZIG | 417,300 | 107 | 39 | B | N6ZE | 1,600 | 4 | 4 | B | JL1ZCG | $V$, JR4EN | , JE8 | , ops) |  |
| SM3AKW | 509,600 | 4 | 4 | B | 7K3LGC | 331,200 | 92 | 36 | B | F6CRP | 1,200 | 4 | 3 | B |  | 088,000 | 102 | 38 | B |
|  | 44 | 22 |  | D | K6MYC | 291,600 | 81 | 36 | B | W3EP/1 | 1,200 | 4 | 3 | B |  |  | 68 | 26 | D |
|  | 50 | 26 |  | E | K1CA | 248,500 | 71 | 35 | B | G4DOL | 900 | 3 | 3 | B | W6TE (+W |  |  |  |  |
| VE1ALQ | 434,000 | 1 | 1 | B | F6BSJ | 234,500 | 67 | 35 | B | K6AAW | 900 | 3 | 3 | B |  | 16,500 | 14 | 10 | B |
|  | 27 | 25 |  | D | DK9ZY | 231,000 | 77 | 30 | B | EA1BFZ | 900 | 3 | 3 | B |  |  | 1 | 1 | D |
|  | 40 | 34 |  | E | KøFF | 223,200 | 72 | 31 | B | JF4TGD/8 | 400 | 2 | 2 | B |  |  |  |  |  |
|  | 2 | + |  | H | K5AIH | 217,600 | 64 | 34 | B | W4LNG | 400 | 2 | 2 | B | Multiope | r, 144 M |  |  |  |
| DK3WG | 427,200 | 39 | 24 | B | N2WK | 201,300 | 61 | 33 | B | AL7EB | 400 | 2 | 2 | B | KB8RQ (+ |  |  |  |  |
|  | , 50 | 24 |  | D | EA2AGZ | 176,000 | 55 | 32 | B | WBøOAJ | 400 | 2 | 2 | B |  | 563,500 | 265 | 59 | B |
| CT1DMK | 424,000 | 35 | 21 | B | EA6VQ | 155,000 | 50 | 31 | B | LY2SA | 400 | 2 | 2 | B | IK3MAC ( |  |  |  |  |
|  | 20 | 13 |  | D | IV3GBO | 132,600 | 51 | 26 | B | SMØNKZ | 400 | 2 | 2 | B |  | 339,200 | 248 | 54 | B |
|  | 25 | 19 |  | E | DL2MHS | 126,900 | 47 | 27 | B | DK5YA | 100 | 1 | 1 | B | F3VS ${ }_{(+ \text {F }}$ | F5JTA) |  |  |  |
| G3LTF | 394,800 | 46 | 24 | D | WøPT | 124,000 | 40 | 31 | B | 7J7ADB (KG6DX, op) |  |  |  |  |  | 276,000 | 232 | 55 | B |
|  | -36 | 21 |  | E | PE1OGF | 117,500 | 47 | 25 | B |  | 100 | 1 | 1 | B | HB9Q (HB9CRQ, HB9DBM, ops) |  |  |  |  |
|  | 2 | 2 |  | F | S52LM | 110,400 | 46 | 24 | B | AC3A | 100 | 1 | 1 | B |  | 697,500 | 155 | 45 | B |
| EA3DXU | 344,000 | 47 | 24 | B | JA6AHB | 110,400 | 46 | 24 | B | PA3BUT | 100 | 1 | 1 | B | R1MVZ | , RN1AM |  |  |  |
|  | 33 | 19 |  | D | SM2BYA | 107,500 | 43 | 25 23 | B | Single Operator, 432 MHz |  |  |  |  |  | 444,600 | 117 | 38 | B |
| KD4LT | 290,400 | 36 | 21 | D | JH5FPQ | 101,200 94,300 | 44 41 | 23 23 | B |  |  |  |  |  | S53J (S57EA, S530Q, S56TZJ, ops) |  |  |  |  |
|  | 30 | 23 |  | E | DL7MAT | 94,300 86,400 | 31 | 23 24 | B | DL9KR | 413,000 392,000 | 118 | 35 35 | D |  | 115,000 | 46 | 25 | B |
| OZ6OL | 287,000 | 31 | 18 | D | DH2COZ | 86,400 | 36 | 24 19 | B | K1FO | 392,000 | 112 | 35 34 | D | VE2JWH | GUQ, VE2 | AY, V | SMG) |  |
|  | 39 | 23 |  | E | LA9NEA | 70,300 68,000 | 37 40 | 19 17 | B | DL9NDD DF3RU | 367,200 339,900 | 108 | 34 33 | D |  | 67,200 | 32 | 21 | B |
| HA1YA | 210,000 | 6 | 6 | B | LA9NEA | 68,000 | 40 33 | 17 20 | B | DF3RU | 339,900 313,500 | 103 95 | 33 33 | D | F1DDG (+ | 30,000 | 20 | 15 |  |
| OH2DG | 54 187,200 | 29 25 |  | D | SV1BTR | 65,100 | 31 | 21 | B | KøRZ | 234,000 | 95 78 | 33 30 | D | HB9MS (H | W, HB9S | L, op |  | B |
|  | - 26 | 19 | 16 | E | WB4JEM | 62,700 | 33 | 19 | B | DL4MEA | 229,400 | 74 | 31 | D |  | 16,500 | 15 | 11 | B |
|  | 1 | 1 |  | F | I2RV | 62,000 | 31 | 20 | B | DJ6MB | 226,200 | 78 | 29 | D | KK5IH (+K |  |  |  |  |
| VE6TA | 176,000 | 38 | 20 | D | $9 \mathrm{A9B}$ | 58,900 | 31 | 19 | B | G3SEK | 222,000 | 74 | 30 | D |  | 4,800 | 8 | 6 | B |
|  | 17 | 12 |  | E | UA4AAV | 57,000 | 30 | 19 | B | ON5OF | 137,500 | 55 | 25 | D | W6YX (W6 | D6FP, op |  |  |  |
| JA5NNS | 143,100 | 9 | 6 | B | WA1JOF | 57,000 | 30 | 19 | B | ON4KNG | 98,900 | 43 | 23 | D |  | 3,000 | 6 | 5 | B |
|  | -44 | 21 |  | D | PA3CWI | 56,000 | 28 | 20 | B | K5WXN | 92,400 | 44 | 21 | D |  |  |  |  |  |
| W7SZ | 128,000 | 23 | 18 | D | WøVD | 51,300 | 27 | 19 | B | 7M2PDT | 88,000 | 44 | 20 | D | Multiope | r, 432 M |  |  |  |
|  | 17 | 14 |  | E | WA6PY | 48,600 | 27 | 18 | B | G4ERG | 69,300 | 33 | 21 | D | OH2PO (+ |  |  |  |  |
| YO21S | 114,800 | 23 | 16 | B | DL2IAN | 44,800 | 28 | 16 | B | JH4JLV | 68,400 | 36 | 19 | D |  | 414,800 | 122 | 34 | D |
|  | 18 | 12 |  | D | PE1LWT | 44,200 | 26 | 17 | B | DL1YMK | 51,200 | 32 | 16 | D | F5FLN (+F | F5FVP, | ARU |  |  |
| W5LUA | 112,000 | 32 | 20 | E | I1ANP | 40,000 | 25 | 16 | B | W8MQW | 51,000 | 30 | 17 | D |  | 171,600 | 66 | 26 | D |
|  | - 2 | 2 |  | F | F9HS | 38,400 | 24 | 16 | B | S52CW | 38,400 | 24 | 16 | D | DJ3FI (+D |  |  |  |  |
|  | 2 | 2 |  | H | W60MF | 35,700 | 21 | 17 | B | DL3EAG | 25,200 | 21 | 12 | D |  | 42,000 | 28 | 15 | D |
|  | 4 | 4 |  | I | J6/K6MYC | 34,500 | 23 | 15 | B | DK3FB | 23,100 | 21 | 11 | D | F 1 CH (+F5 | F5IVP) |  |  |  |
| W4AD | 105,600 | 36 | 19 | B | W3SZ | 32,200 | 23 | 14 | B | UT3LL | 22,400 | 16 | 14 | D |  | 32,400 | 18 | 18 | D |
|  | 8 | 5 |  | E | K7YVZ | 32,200 | 23 | 14 | B | JJ1NNJ | 21,600 | 18 | 12 | D | DKØMM (D | G, DL2FC | ,ops) |  |  |
| S51ZO | 62,000 | 17 | 10 | B | S51UE | 29,400 | 21 | 14 | B | IK5WJD | 21,600 | 18 | 12 | D |  | 2,800 | 7 | 4 | D |
|  | -14 | 10 |  | D | SP2JXN | 28,600 | 22 | 13 | B | IK5QLO | 20,800 | 16 | 13 | D |  |  |  |  |  |
| WBøGGM | 56,000 | 18 | 13 | B | JR3REX | 24,000 | 20 | 12 | B | JA2TY | 16,500 | 15 | 11 | D | Multiope | r, 1296 | Hz |  |  |
|  | -10 | 7 |  | D | VK3CY | 23,400 | 18 | 13 | B | JR1RCH | 6,300 | 9 | 7 | D | ON5RR (+ |  |  |  |  |
| N3FA | 43,700 | 17 | 14 | B | EA1ABZ | 22,100 | 17 | 13 | B | KBøVUK | 3,000 | 6 | 5 | D |  | 81,400 | 37 | 22 | E |
|  | 6 | 5 |  | D | DL2OM | 22,100 | 17 | 13 | B | JH1EFA | 1,600 | 4 | 4 | D | WA9OUU | 8IFM, W8 | LC, N | ZW, |  |
| JHøWJF | 35,200 | 13 | 8 | B | NØAKC | 22,000 | 20 | 11 | B | K6JEY | 400 | 2 | 2 | D | KB8UHY) |  |  |  |  |
|  | 9 | 8 |  | D | KV6J | 20,800 | 16 | 13 | B |  |  |  |  |  |  | 42,500 | 25 | 17 | E |
| W7GJ | 24,000 | 2 | 2 | A | YO2AMU | 19,800 | 18 | 11 | B | Single O | ator, 129 | M Hz |  |  | HA5SHF | BGL, HA5 | MU) |  |  |
|  | 18 | 10 |  | B | WA3BZT | 18,000 | 15 | 12 | B | K5JL | 247,500 | 75 | 33 | E |  | 16,800 | 14 | 12 | E |
| JA4BLC | 18,200 | 2 | 2 | B | DJ3MY | 18,000 | 15 | 12 | B | K4Q1 | 195,000 | 65 | 30 | E | KB4FEM ( | S, N4SZ | J4X, | 4SO, |  |
|  | - 5 | 4 |  | D | I3EVK | 15,000 | 15 | 10 | B | HB9BBD | 191,400 | 66 | 29 | E | N4AK, WA |  |  |  |  |
|  | 6 | 6 |  | E | JHØISW | 13,000 | 13 | 10 | B | F5PAU | 167,400 | 54 | 31 | E |  | 400 | 2 | 2 | E |
|  | 1 | 1 |  | F | F8DO | 12,800 | 16 | 8 | B | OH2AXH | 162,400 | 58 | 28 | E |  |  |  |  |  |
| JHøBBE | 1,600 | 1 | 1 | B | SM4HFI | 12,000 | 12 | 10 | B | K2DH | 140,000 | 50 | 28 | E | Multiope | r, 5760 | Hz |  |  |
|  | 3 | 3 |  | D | JK1HIX | 11,700 | 13 | 9 | B | W2UHI | 135,200 | 52 | 26 | E | OK1KIR (+ | AI, OK1D |  |  |  |
|  |  |  |  |  | WøEKZ | 11,700 | 13 | 9 | B | EA3UM | 112,800 | 47 | 24 | E |  | 600 | 3 | 2 | H |
| Single Operator, 144 MHz |  |  |  |  | K7MAC | 11,000 | 11 | 10 | B | DJ5MN | 110,000 | 44 | 25 | E |  |  |  |  |  |
| SM5FRH | 1,920,000 | 320 | 60 | B | SV4BGY | 10,800 | 12 | 9 | B | OK1DFC | 98,800 | 38 | 26 | E |  |  |  | 45 |  |

